

2011-04-20 Wednesday Morning Notes

Wednesday, April 20, 2011
7:25 AM

Stacking and Transfers

- Stacked
- Unstacked 523E10 in 59 transfers over 19 sets with an overall efficiency of 93.7%
 - Take out 24170 (4/19/11 15:53, 70mA)
 - 24171 (4/19/11 18:49, 63mA)
 - Still only 94.7%

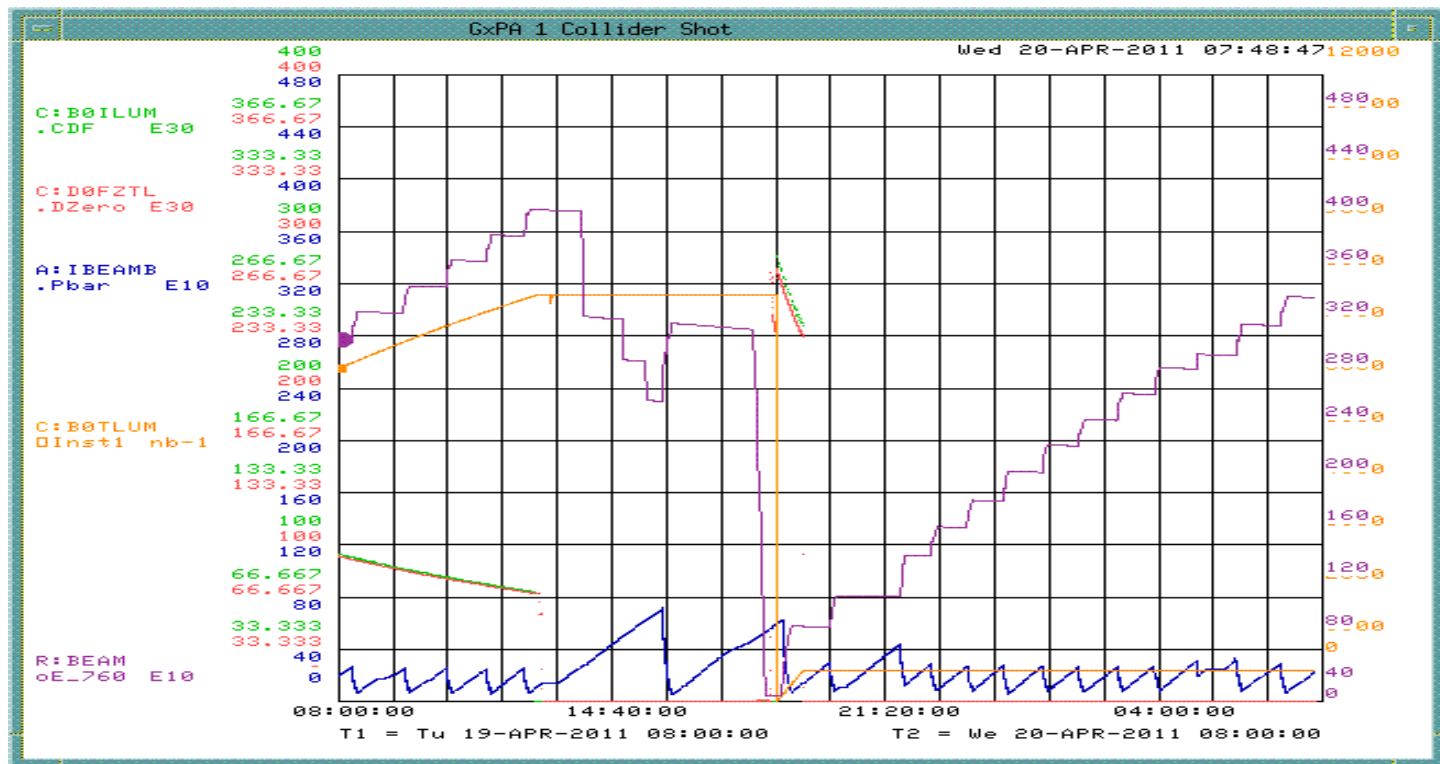
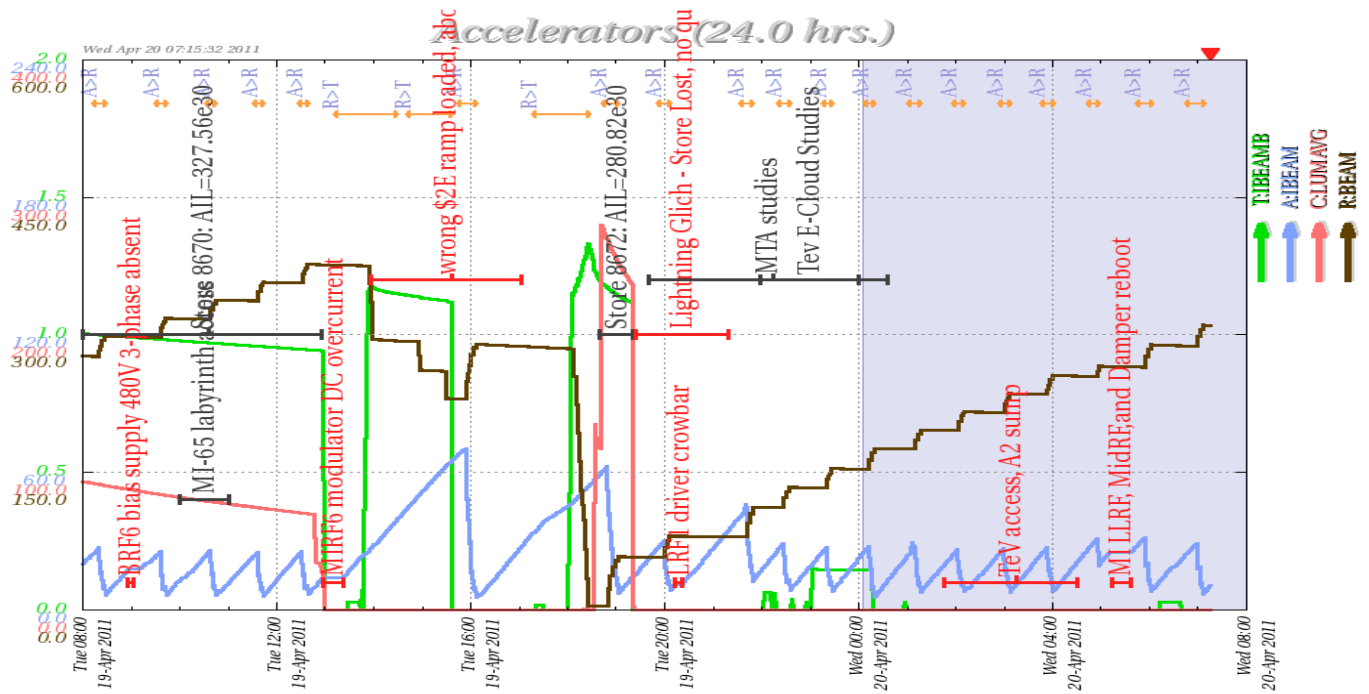
Operational Notes

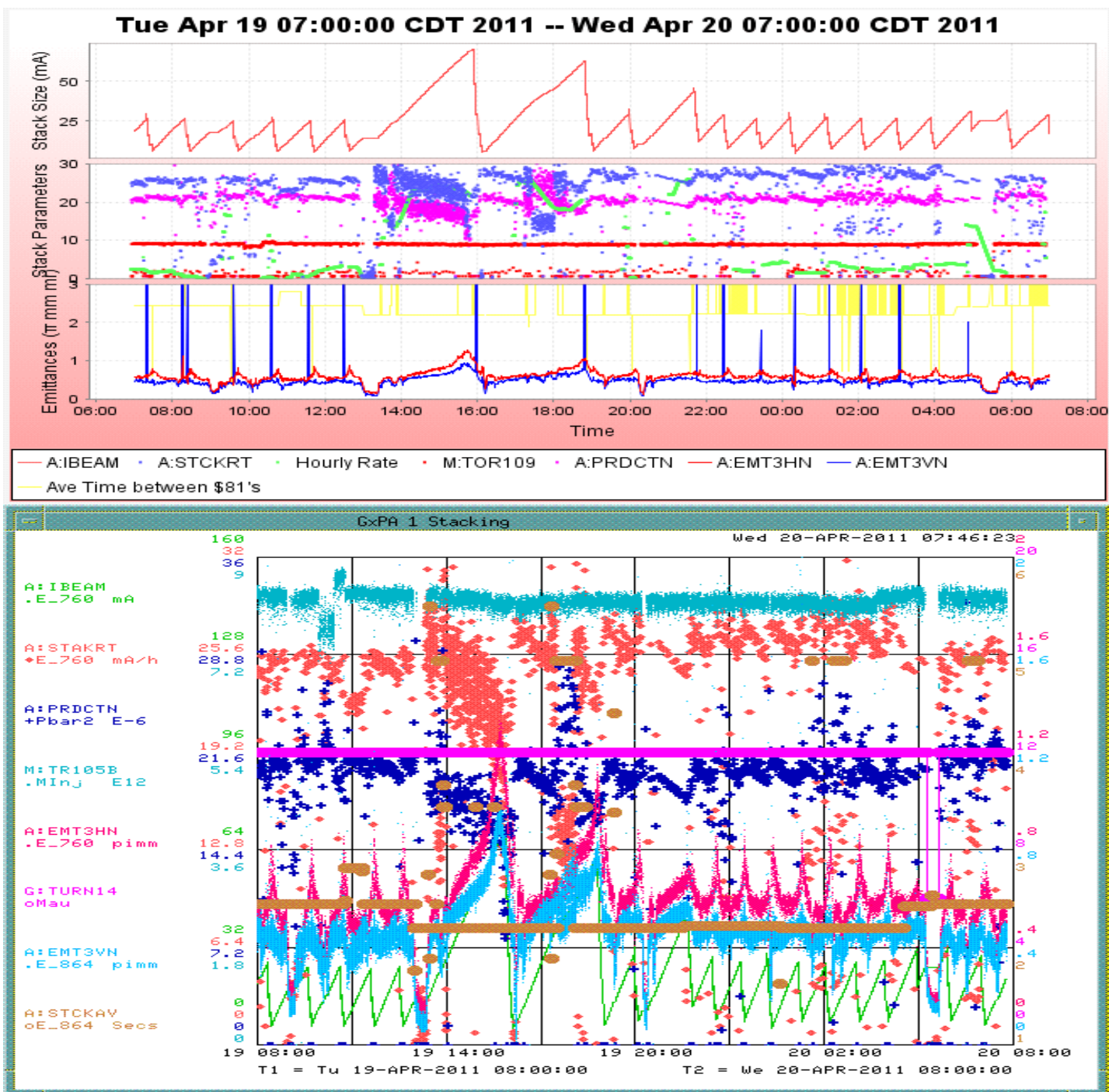
- Lost helix supply H1HV01 and H1TW01 won't stay on after evening shift lightning glitch. Tunnel problem.
- Target is showing signs of further degradation.

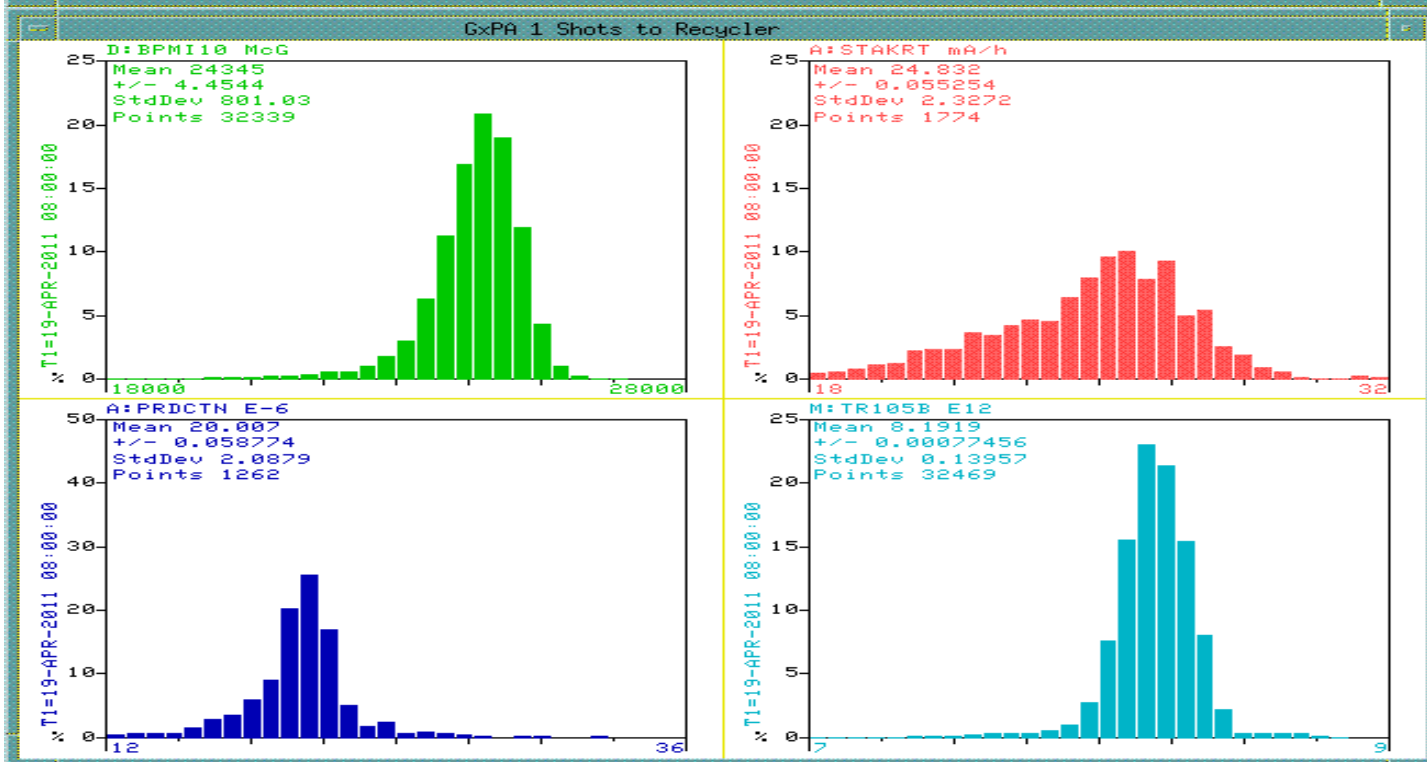
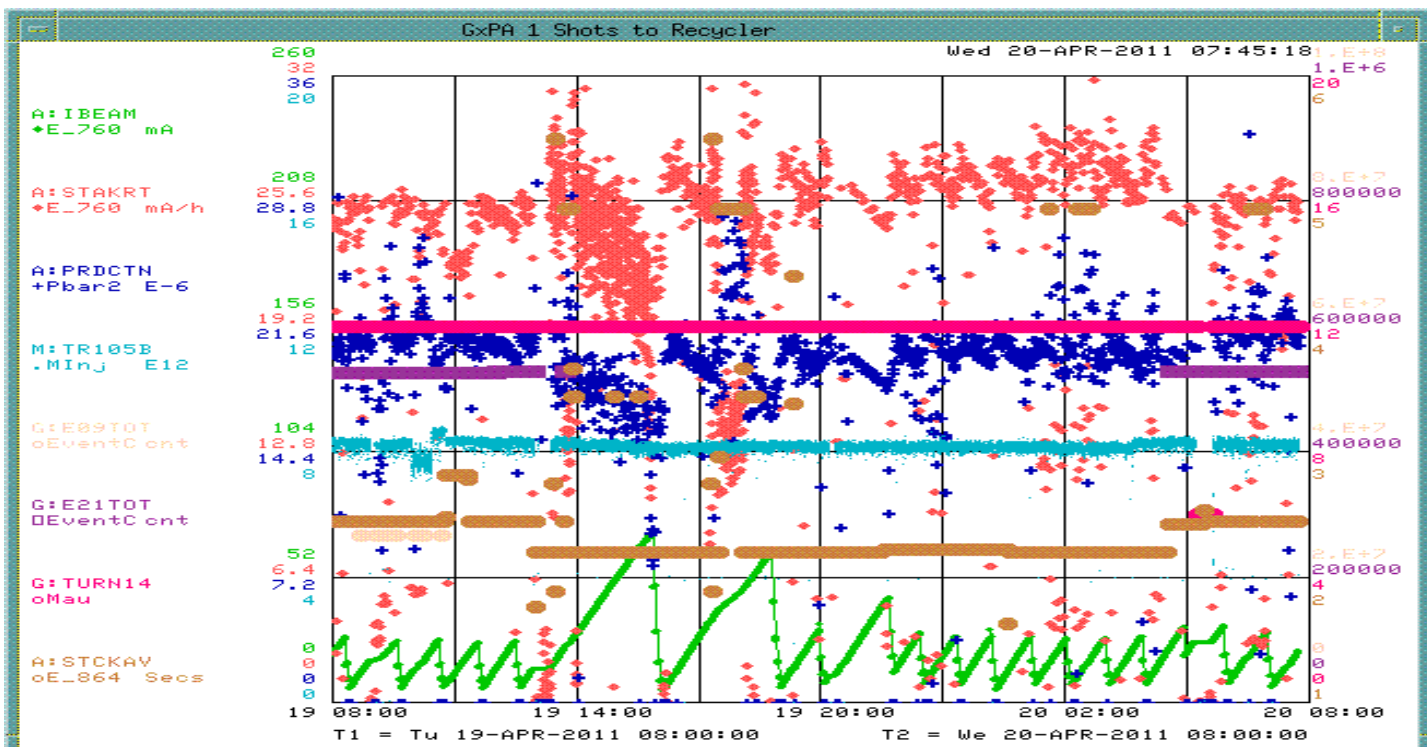
Numbers

- Stacking
 - Pbars stacked: 536.42 E10
 - Time stacking: 23.71 Hr
 - Average stacking rate: 22.63 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 35835
 - Number of pulses with beam: 32856
 - Fraction of up pulses was: 91.69%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 21.74 Hr
 - Possible average stacking rate: 24.68 E10/Hr
 - Could have stacked: 585.06 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 522.21 E10
 - Number of transfers : 59
 - Number of transfer sets: 19
 - Average Number of transfer per set: 3.11
 - Time taken to shoot including reverse proton tuneup: 00.21 Hr
 - Transfer efficiency: 93.13%
- Other Info
 - Average POT : 8.19 E12
 - Average production: 19.94 pbars/E6 protons

Plots

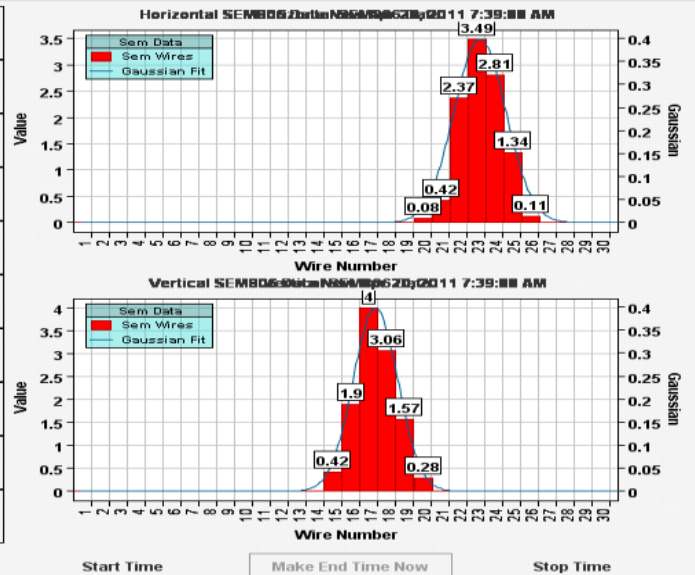






Horizontal Area New	10.63	Intensity
Horizontal Area Calc	188.52	Intensity
Horizontal Sigma New	3.37	mm
Horizontal Sigma Calc	3.18	mm
Horizontal Mean	24.67	mm
Vertical Area New	11.25	Intensity
Vertical Area Calc	194.52	Intensity
Vertical Sigma New	3.33	mm
Vertical Sigma Calc	3.13	mm
Vertical Mean	7.15	mm

[View Lumberjack Data](#)
[Pause](#)
[Old Hardware](#)



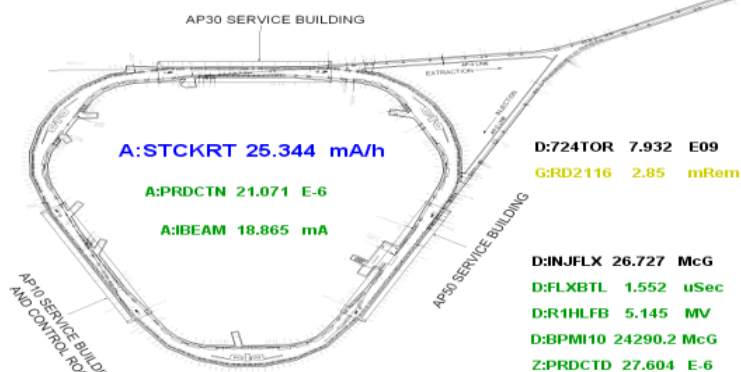
Pbar Source Accumulator, Debuncher, AP1, AP2, & AP3 Beamline Views

A:IBMINJ 14.503 e07 **A:FRWDTH 19.4 Hz** **A:EMT3HN 0.541 pimm**
A:LFTOVR 1.441 % **A:CENFRQ 628897. Hz** **A:EMT3VN 0.443 pimm**
A:STMEDS 10.031 MeV **A:R2DDS1 628897. Hz** **A:XFRNXT 75.0 mA**
A:R1HLFB 25.746 kV

Program Running: **Yes**

V:APSMOD: **Stacking**

MI EFF 0.88
M:TR105B 8.103 E12
G:TURN14 12.0 Turns
I:14SUM3 9.235 E12

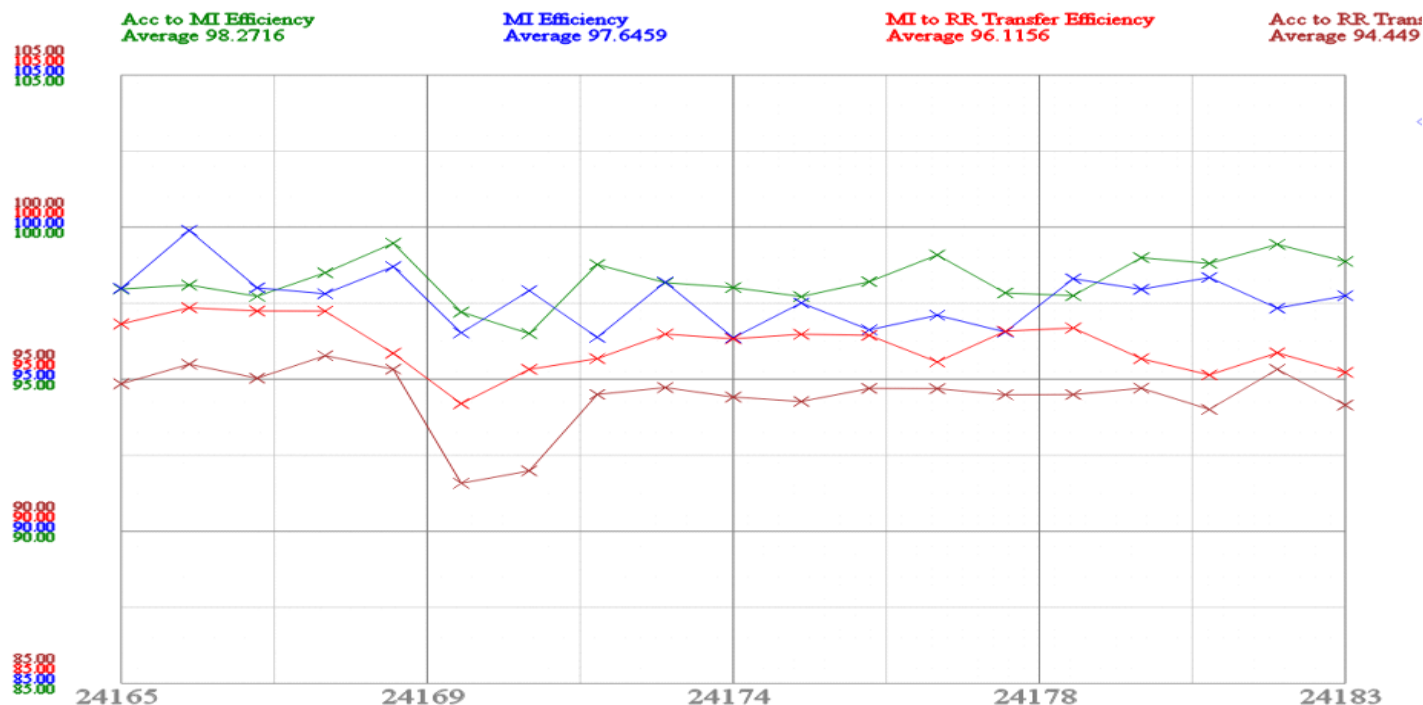


Pbar Beamlines BPM House Status

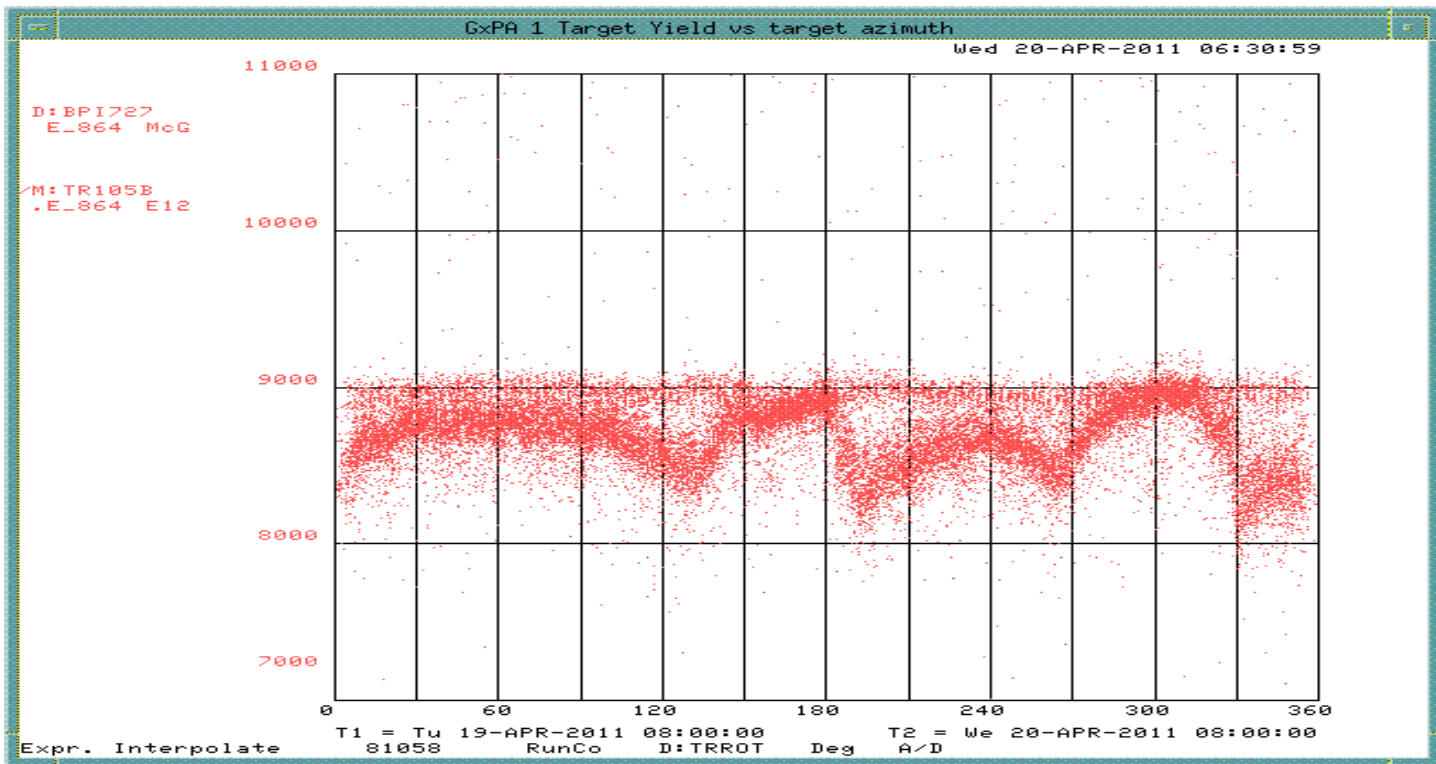
P1
P2
AP1
AP2 F27
AP2 AP50

0x80 Event Detected
A:STCKAV 2.45 Secs

Overthrunder Status



Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number_20_A:BEAMB sampled on \$91 (A:BEAM7), E10	Column 22 Number_21_A:BEAMB sampled on \$94 (A:BEAM7), E10	Unstacked (mA)	Column 23 Number_22_R:BEAMS (R:BEAM0) pre transfer, E10	Column 24 Number_23_R:BEAMS (R:BEAM0) post transfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI2 Efficiency	Transfers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance	
Totals =>				523.17			490.01	93.66%	97.96%	95.47%	93.52%	59	19	5.9428	4.4614	1.9455	
Daily Average =>				523.17			490.01						59	19			
24183	Wednesday, April 20, 2011	6:58	29.52	6.70	25.02	287.75	310.72	23.48	93.84%	98.74%	96.72%	95.51%	3	1	5.393	4.075	1.92
24182	Wednesday, April 20, 2011	5:54	31.91	8.19	26.31	264.78	289.40	25.06	95.26%	99.44%	96.95%	96.41%	3	1	5.611	4.173	1.949
24181	Wednesday, April 20, 2011	4:56	31.54	19.30	12.25	254.66	266.17	11.51	94.01%	98.81%	97.17%	96.02%	1	1	5.967	4.793	1.885
24180	Wednesday, April 20, 2011	3:53	27.67	7.83	22.47	235.19	256.03	21.26	94.63%	99.07%	96.72%	95.82%	3	1	6.052	4.245	1.976
24179	Wednesday, April 20, 2011	3:00	27.26	7.57	22.34	215.33	236.14	21.13	94.60%	97.58%	96.54%	94.20%	3	1	6.095	4.319	1.968
24178	Wednesday, April 20, 2011	2:03	26.89	7.61	21.94	195.82	216.22	20.70	94.37%	97.72%	94.55%	92.39%	3	1	5.925	4.297	1.968
24177	Wednesday, April 20, 2011	1:10	27.52	7.71	22.46	175.56	196.53	21.21	94.42%	98.75%	96.03%	94.83%	3	1	5.618	4.478	1.98
24176	Wednesday, April 20, 2011	0:12	27.79	5.44	23.86	153.75	176.11	22.57	94.61%	98.34%	94.80%	93.22%	3	1	4.949	3.615	1.939
24175	Tuesday, April 19, 2011	23:19	27.32	7.69	22.32	133.44	154.22	21.04	94.29%	97.97%	95.60%	93.66%	3	1	5.935	4.293	1.994
24174	Tuesday, April 19, 2011	22:27	29.14	8.26	23.55	111.87	133.88	22.22	94.37%	98.04%	94.56%	92.71%	3	1	5.933	4.465	1.988
24173	Tuesday, April 19, 2011	21:41	44.11	12.52	34.17	80.19	112.22	32.32	94.60%	98.13%	96.26%	94.46%	3	1	6.245	4.814	1.891
24172	Tuesday, April 19, 2011	19:59	30.36	8.06	24.98	57.11	80.54	23.61	94.54%	98.99%	95.59%	94.62%	3	1	5.891	4.631	1.964
24171	Tuesday, April 19, 2011	18:49	62.89	6.73	60.90	4.12	58.28	55.27	90.75%	96.32%	93.61%	90.16%	5	1	8.05	5.837	1.892
24170	Tuesday, April 19, 2011	15:53	70.41	5.58	69.08	230.13	290.30	62.45	90.41%	96.93%	93.47%	90.60%	5	1	7.779	5.686	1.783
24169	Tuesday, April 19, 2011	12:31	25.97	6.45	22.09	356.50	377.24	21.05	95.33%	99.18%	98.12%	97.31%	3	1	5.546	4.188	1.993
24168	Tuesday, April 19, 2011	11:36	25.31	6.14	21.70	337.20	357.62	20.79	95.81%	98.50%	96.32%	94.88%	3	1	5.554	4.16	1.975
24167	Tuesday, April 19, 2011	10:37	26.15	6.38	22.25	317.50	338.30	21.09	94.78%	97.51%	95.14%	92.77%	3	1	5.326	4.31	1.974
24166	Tuesday, April 19, 2011	9:35	25.64	6.23	21.95	297.63	318.30	20.93	95.38%	98.20%	97.28%	95.53%	3	1	5.479	4.202	1.98
24165	Tuesday, April 19, 2011	8:20	27.32	6.28	23.56	276.52	298.54	22.29	94.63%	97.80%	95.90%	93.78%	3	1	5.566	4.186	1.945



Target 17 degrading

